

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION DR-497

Effective October 1, 2011

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **October 2014**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Partner 21A Steel Glazed Outswing Hinged Single Doors, Non-impact Resistant, manufactured by:

A.J. Manufacturing, Inc.
1217 Oak Street
Bloomer, WI 54724
Telephone: (715) 568-2204

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation report.

PRODUCT DESCRIPTION

The doors evaluated in the report are steel outswing glazed single doors. The steel outswing glazed single doors evaluated in this report are non-impact resistant. This product evaluation report is for steel outswing glazed single doors based on the following tested construction:

General Description:

System	Description	Label Rating
1	Partner 21A Steel Glazed Outswing Single Doors; X	+50, -43 psf ASTM E 330

Door Panel Dimensions:

System	Overall Frame Size	Panel Size	Daylight Opening Size
1	38 $\frac{9}{16}$ " x 80 $\frac{7}{8}$ "	35 $\frac{3}{4}$ " x 79"	Door Panel: Overall size: 21" x 35"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	GM-1

Note: ¹ See the "Glass Construction Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

IG-1: The door panel contains a sealed insulating glass units. The insulating glass units are comprised of two double strength ($\frac{1}{8}$ ") fully tempered glass lites separated by a desiccant-filled aluminum spacer system. The glass thickness used in the insulating glass unit of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass unit is glazed using a plastic glazing installation kit. The glass is set from the interior against a butyl tape. The interior plastic glazing stops are secured to the exterior plastic glazing stop with screws. The glass kit is factory installed.

Frame Construction: The frame is constructed of extruded aluminum that is square-cut, butted and secured with screws and sealed with a seam sealer.

Door Panel Construction: The door panel is constructed of LVL stiles and TPE rails that are square cut, butted and secured with 28 gauge steel skins with rolled over edges. The interior of the door consists of pressure injected polyurethane foam.

Reinforcement: Each hinge location is reinforced with 1.5" x 5.5" long by $\frac{1}{8}$ " thick aluminum reinforcement plate.

Hardware:

- 4 $\frac{1}{2}$ " x 4" butt hinges; A.J. Manufacturing, three (3) required; Each hinge is secured to the door panel with three (3) No. 12-24 x $\frac{3}{8}$ " screws. Each hinge is secured to the door side jambs with three (3) screws, two (2) No. 12-24 x $\frac{3}{8}$ " screws utilized at the outermost holes and one (1) No. 10 x $3\frac{1}{2}$ " screw utilized in the middle hole to secure the door to the wall framing.
- Lockset handle/knob; Tell Manufacturing RE3100 Grade 2 entry lock; one (1) required.
- Lockset strike plate; Two (2) No. 10 x $3\frac{1}{2}$ " screws secure the strike plate through the door frame jamb and into the wall framing.
- Deadbolt; Tell Manufacturing LI 1310, Grade 2 deadbolt; one (1) required.
- Deadbolt strike plate; Two (2) No. 10 x $3\frac{1}{2}$ " screws secure the strike plate through the door frame jamb and into the wall framing.

Product Identification: A manufacturer's label will be applied to indicate the manufacturer's name, Model 21A Partner Door, door configuration, and performance characteristics that indicate the allowable design pressure rating of the assembly.

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	38 $\frac{9}{16}$	80 $\frac{7}{8}$	+50, -43

Impact Resistance: These door assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These door assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Door assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The door assemblies shall be installed in accordance with the manufacturer's recommended installation instructions and this product evaluation. Detailed installation instructions and drawings are available from the manufacturer.

Installation: The wood wall framing members shall be minimum Southern Pine dimension lumber. The door is secured to the wall framing through the jambs with minimum No. 10 x 3 ½" screws. The screws are located 4 inches from each end and spaced 16 inches on center thereafter. Each hinge location has one (1) No. 10 x 3 ½" screw and each keeper has two (2) No. 10 x 3 ½" screws. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.